Nov 08 06 11:55a 503 356 1415 p.6

IN THE CLAIMS

Please amend claims 1-24 to the following:

- 1. (Previously Amended) A method comprising:
 - depositing a zeolite solvent solution on an underlying layer;
 - removing at least some of the solvent from the zeolite solvent solution to form a zeolite film; and
 - depositing a carbon doped oxide (CDO) in the zeolite film to form a zeolite CDO composite film;
 - etching a via opening and a trench opening in CDO-zeolite composite film; forming a conductive material in the via opening and the trench opening.
- 2. (Original) The method of claim 1, wherein the solvent is water.
- 3. (Original) The method of claim 1, wherein the solvent is an organic oligomer.
- 4. (Original) The method of claim 3, wherein the organic oligomer is selected from a group consisting of polyethylene glycol, poly styrene, poly (Methacrylates), Poly (acrylate), or poly ethylene oxide.
- 5. (Original) The method of claim 1, wherein removing at least some of the solvent from the zeolite solvent solution comprises:drying the zeolite solvent solution.

Nov 08 06 11:56a 503 356 1415 p.7

6. (Original) The method of claim 1, wherein removing at least some of the solvent from the zeolite – solvent solution comprises:
vacuuming the zeolite – solvent solution.

- 7. (Original) The method of claim 1, wherein depositing the zeolite solvent solution on the underlying layer comprises:
 - spin-coating the zeolite solvent solution on the underlying layer.
- 8. (Original) The method of claim 1, wherein depositing the zeolite solvent solution on the underlying layer comprises:
 dip-coating the zeolite solvent solution on the underlying layer.
- 9. (Original) The method of claim 1, wherein depositing the CDO in the zeolite film comprises: chemical vapor deposition of the CDO in the zeolite film.
- 10. (Original) The method of claim 1, wherein the CDO is a silicon oxide.
- 11. (Original) The method claim 1, wherein the underlying layer is a wafer.
- 12. (Original) The method claim 1, wherein the underlying layer is an interlayer dielectric layer.
- 13. (Original) The method claim 12, wherein the interlayer dielectric layer comprises a zeolite carbon doped oxide composite film.

10/716,250

Nov 08 06 11:56a 503 356 1415 p.8

14. (Original) The method of claim 1, further comprising calcinating the zeolite - CDO composite film to form a solid phase zeolite - CDO composite film.

15. (Original) The method claim 14, wherein calcinating the zeolite - CDO composite film comprises:

heating the zeolite – CDO composite film; and cooling zeolite – CDO composite film.

- 16. (Original) The method of claim 15, wherein heating the zeolite CDO composite film is done in an oven.
- 17. (Original) The method of claim 16, wherein the oven is at a temperature in the range of 300°C to 550°C.
- 18. (Original) The method of claim 14, wherein the steps of depositing the zeolite solvent solution, removing at least some of the solvent from the zeolite solvent solution, and depositing a CDO are repeated before calcinating the zeolite CDO composite film to achieve a thicker zeolite CDO composite film.

19. (Original) A method comprising:

forming a zeolite – carbon doped oxide (CDO) composite interlayer dielectric on an underlying layer;

etching a via opening and a trench in the zeolite – CDO composite interlayer dielectric; and forming a conductive material in the via opening and the trench.

20. (Original) The method of claim 19, wherein forming the zeolite – CDO composite interlayer dielectric on the underlying layer comprises:

depositing a zeolite - solvent solution on the underlying layer;

drying the zeolite – solvent solution to remove at least some of the solvent to form a zeolite film; and

depositing a CDO in the zeolite film by chemical vapor deposition to form a zeolite - CDO composite film;

heating the zeolite - CDO composite film; and

cooling the zeolite - CDO composite film.

- 21. (Original) The method of claim 20, wherein depositing the zeolite solvent solution on the underlying layer comprises spin-coating the zeolite solvent solution on the underlying layer.
- 22. (Original) The method of claim 20, wherein depositing the zeolite solvent solution on the underlying layer comprises dip-coating the zeolite solvent solution on the underlying layer.

Nov 08 06 11:56a 503 356 1415 p.10

- 23. (Original) The method of claim 20, wherein the CDO is a silicon oxide.
- 24. (Original) The method claim 20, wherein the underlying layer is a wafer.
- 25. (Withdrawn) An interconnect structure comprising:
 - at least a via and a trench defined by a carbon doped oxide (CDO) zeolite composite dielectric, which is disposed above an underlying layer;
 - a barrier layer disposed on the surfaces of the carbon doped oxide (CDO) zeolite composite dielectric; and
 - conductive material disposed in the via opening and the trench.
- 26. (Withdrawn) The interconnect structure of claim 25, wherein the CDO is a silicon oxide.
- 27. (Withdrawn) The interconnect structure of claim 25, wherein the barrier layer comprises tantalum.
- 28. (Withdrawn) The interconnect structure of claim 25, wherein the conductive material comprises a copper alloy.
- 29. (Withdrawn) The interconnect structure of claim 25, wherein the underlying layer is a wafer.

10/716,250